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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,851

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Kazuhiro Chiba

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10/15/2010

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ALEXANDRIA, VA 22314

EXAMINER

LEVKOVICH, NATALIA A

ART UNIT

PAPER NUMBER

1773

NOTIFICATION DATE

DELIVERY MODE

10/15/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/574,851	<b>Applicant(s)</b> CHIBA, KAZUHIRO	
	<b>Examiner</b> NATALIA LEVKOVICH	<b>Art Unit</b> 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on the election filed on 09/20/2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 and 24-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-23, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/06/2006 and 11/21/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of apparatus claims, made with traverse in the reply filed on 09/20/2010, has been acknowledged. Therefore, claims 17-20 and 24-30 have been withdrawn from further consideration under 37 CFR 1.142(b), as being directed to the non-elected invention(s). Accordingly, claims 21-23 and 31-32 are subject to examination on the merits, as presented below. The current statement clarifies the record and corrects the obvious typographic error in the 08/19/2010 restriction requirement where the apparatus claims were listed as 21-23, 30-31, rather than 21-23, 31-32.

Applicant traverses the prior restriction requirement on the grounds that the Office, allegedly, 'has not provided any indication that the content of the claims interpreted in light of description was considered in making the assertion of a lack of unity', or that the inventions are patentably distinct. This argument is not found persuasive. The method claims 17-20 and 24-30 do not require the structural elements that are positively recited in the apparatus claims 21-23 and 31-32 (namely, a heater, or a reaction container having a heater; a sampler; a stirrer / stimulator; a cooler / cooling apparatus, including means for extracting, means for putting a solid, or mixing means ; and a controller). Thus, there is no technical feature that would be required by both groups of claims [i.e., 'common technical feature' to be evaluated against the prior

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art to determine whether or not the common technical feature contributes any novelty over the prior art; that is, whether or not the common technical feature constitutes a 'special technical feature']. Based on these considerations, it is maintained that *the unity of inventions is lacking*. Additionally, the two claim groups require searches that would not overlap and would involve different search strategies, reasoning and search terms. Thus, examination of the non-elected invention(s) would inevitably impose a significant and undue burden on the Examiner.

Applicant is also reminded that , as was recited in the prior Office action, should Applicant traverse on the ground that the inventions are not patentably distinct, Applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Based on the above discussed considerations, the restriction requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims, as well as any structural detail that is essential for a proper understanding of the disclosed invention. Therefore, the heater

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configured for heating a number of reaction containers; the sampler; the first and second phases; the reaction container having a heater; the stimulator; as well as the controller configured for controlling the time of operations, must be clearly shown and referenced, or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Priority***

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3. Receipt of certified copies of the foreign priority applications submitted on 04/06/2006 under 35 U.S.C. 119(a)-(d), has been acknowledged, the copies being made of record.

It is further noted that no English translation of the above mentioned foreign priority papers was provided by the Applicant.

Should Applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of interference, a certified English translation of the foreign application must be submitted in reply to this action. See 37 CFR 41.154(b) and 41.202(e). Therefore, Applicant cannot currently rely upon the foreign priority papers to overcome art rejections because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

### **Claim Rejections - 35 USC § 112**

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 21-23 and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being unclear for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 21, it is not clear whether or not the recitation of 'a heater for heating a number of reaction containers simultaneously and maintaining the reaction containers at a predetermined temperature' means that the controller

recited in the last lines of the claim must be connected to the heater and to at least one temperature sensor configured to provide a feedback information to the controller. It is also not clear what structural features would configure the cooler for 'cooling the uniform solution within the reaction container without cooling the reaction container'.

Additionally, it is unclear whether or not the recitation of 'each container' means that the apparatus must include at least two containers.

In claim 23, it is unclear whether or not 'the uniform solution' is the same as the two-phase solution recited in claim 21; 'the uniform solution' lacking antecedent basis. Similarly, it is further unclear whether or not the 'sampler for putting a solid' is the same as the 'sampler for putting a sample', as recited in claim 21. For clarity, it is assumed to be the same. The same considerations apply to the 'stirrer for mixing the compound having a low boiling point' of claim 23 and to the 'stirrer for stirring the sample' of claim 21. See also claims 31 and 32, with respect to the stimulator and the mixing means.

In claim 31, it is unclear how the 'stimulator' is related to the 'material solution' and to the 'uniform solution', the latter lacking antecedent basis.

Regarding claim 32, it is noted that the phrase 'means for mixing a compound' is preceded by the word 'mixing'. Thus, the phrase "means for" is modified by the act ['mixing'] preceding the phrase, and it is unclear whether the recited act is sufficient for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. If Applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, Applicant is required to amend the claim so that the phrase "means for" is clearly **not** modified by sufficient acts for performing the claimed function.

If Applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, Applicant is required to amend the claim so that it will clearly not be a means plus function limitation (e.g., deleting the phrase 'means for').

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 21-23 and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Horhota (US 20010036898).

With respect to claims 21, 23 and 31-32, Horhota discloses an extraction apparatus comprising, as shown in Figure 1, an isothermal oven 10 ['heater for heating a number of reaction containers simultaneously and maintaining the reaction containers at a predetermined temperature', 'stimulator']; metering pump 6 ['sampler'] configured for supplying additives into reaction container(s) 9; and metering pump 3 fitted with a cooled head ['cooler / cooling apparatus / syringe' configured for 'cooling the uniform solution within the reaction container without cooling the reaction container', 'means for putting a solid of which the temperature is lower of that of the reaction container']. Horhota also discloses apparatuses having an impeller ['stirrer', 'stimulator', 'mixing means' - see paragraph [0015]]; and further teaches in [0051] that the 'rates of extraction or reaction may be controlled through the selection of suitable magnitude,



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frequency and hold times' for pressure modulations, which means that the apparatus must include a controller for selecting, setting and controlling suitable hold times.

In reference to claim 22, it is noted that, since the solutions are not positively recited as a part of the claimed invention, they are not accorded any patentable weight.

Additionally, regarding claim 32, Figure 1 also shows metering pump / 13 ['means for extracting'].

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Alternatively, claims 21-23 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horhota.

Horhota does not explicitly describes the impeller ['stirrer', 'stimulator', 'mixing means' as a feature included into the invented apparatus. However, it would have been clearly within the ordinary skill of an artisan at the time the invention was

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made, .to have modified the apparatus of Horhota by employing an impeller, in order to further improve mixing in the reaction container. `

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Levkovich whose telephone number is 571-272-2462. The examiner can normally be reached on Mon-Fri, 2 p.m.-10 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Natalia Levkovich/

Examiner, Art Unit 1797